

CPME0441201

## Patent Office of the People's Republic of China

Address : Receiving Section of the Chinese Patent Office, No. 6 Tucheng Road West, Haidian District, Beijing. Postal code: 100088

<b>Applicant</b>	KOBELCO CONSTRUCTION MACHINERY CO., LTD.		<b>Seal of Examiner</b>	<b>Date of Issue</b>
<b>Agent</b>	China Patent Agent (H.K.) Ltd.			February 10, 2006
<b>Patent Application No.</b>	200410035097.6	<b>Application Date</b>	April 23, 2004	<b>Exam Dept.</b>
<b>Title of Invention</b>	HYDRAULIC VALVE DEVICE AND METHOD FOR ASSEMBLING THE SAME			

*First Office Action*

1. ☒ Pursuant to the provision of Article 35 (1) of the Chinese Patent Law, the examiner made an examination as to substance of the captioned patent application for invention upon the request for substantive examination filed by the applicant on \_\_\_\_\_.
- ☐ Pursuant to the provision of Article 35 (2) of the Chinese Patent Law, the Chinese Patent Office has decided to conduct on its own initiative an examination as to substance of the captioned patent application for invention.
2. ☒ The applicant requests taking the filing date, Apr. 23, 2003, at the JP Patent Office, the filing date, \_\_\_\_\_, at the \_\_\_\_\_ Patent Office, the filing date, \_\_\_\_\_, at the \_\_\_\_\_ Patent Office as the priority date of the present application.
- ☒ A copy of the first filed patent application certified by the receiving organ of the initial country of filing has been submitted by the applicant.
- ☐ A copy of the first filed patent application certified by the receiving organ of the initial country of filing has not been submitted by the applicant. Pursuant to the provision of Article 30 of the Chinese Patent Law, no priority right shall be deemed to have been claimed.
3. ☐ The applicant filed amended application document(s) on \_\_\_\_\_ and \_\_\_\_\_.
- ☐ Examination has confirmed that \_\_\_\_\_ filed on \_\_\_\_\_ cannot be accepted, \_\_\_\_\_ filed on \_\_\_\_\_ cannot be accepted,
- as the above amendment(s) ☐ is/are not in conformity with the provision of Article 33 of the Chinese Patent Law.
- ☐ is/are not in conformity with the provision of Rule 51 of the Implementing Regulations of the Chinese Patent Law.

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☐ For the specific reason that the amendment(s) cannot be accepted, see the text of the Office Action.

4. ☒ The examination is conducted in the light of the original application document(s)

☐ The examination is conducted in the light of the following application document(s):  
in the original application documents submitted on the filing date:

Claim(s) \_\_\_\_\_, page(s) \_\_\_\_\_ of the description, Figure(s) \_\_\_\_\_  
of the drawing(s); Claim(s) \_\_\_\_\_, page(s) \_\_\_\_\_ of the description,  
Figure(s) \_\_\_\_\_ submitted on \_\_\_\_\_; Claim(s) \_\_\_\_\_, page(s) \_\_\_\_\_  
of the description, Figure(s) \_\_\_\_\_ submitted on \_\_\_\_\_

☐ Abstract of the description submitted on \_\_\_\_\_.

5. ☐ The present Office Action has been prepared without a search having been conducted.

☒ The present Office Action has been prepared with a search having been conducted.

☒ The following reference document(s) is/are cited in this Office Action (its/their serial number(s) will, continue to be used throughout the examination procedure):

IDS filed on 09/27/04 →

IDS filed 09/27/04 →

No.	Number or Title of Document	Date of Publication (or filing date of interfering application)
1	US5138837 A	(Date) Aug. 18, 1992
2	US6430922 B2	(Date) Aug. 13, 2002
3	EP1253327 A1	(Date) Oct. 30, 2002
4		
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6		

6. The concluding comments of the examiner are:

☐ On the description:

☐ The content of the application comes within the scope where no patent right is granted as provided in Article 5 of the Patent Law.

☐ The description is not in conformity with the provision of Article 26(3) of the Patent Law.

☐ The drafting of the description is not in conformity with the provision of Rule 18 of the Implementing Regulations.

☒ On the claims:

☐ Claim comes within the scope where no patent right is granted as provided in Article 25 of the Patent Law.

☐ Claim is not in conformity with the definition of invention in Rule 2(1) of the Implementing Regulations.

☒ Claim 15 does not possess novelty as provided in Article 22(2) of the Patent Law.

☒ Claim 1-3 does not possess inventiveness as provided in Article 22(3) of the Patent Law.

- ☐ Claim \_\_\_\_\_ does not possess practical applicability as provided in Article 22(4) of the Patent Law.
- ☐ Claim \_\_\_\_\_ is not in conformity with the provision of Article 26(4) of the Patent Law.
- ☐ Claim \_\_\_\_\_ is not in conformity with the provision of Article 31(1) of the Patent Law.
- ☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Rules 20-23 of the Implementing Regulations.
- ☐ Claim \_\_\_\_\_ is not in conformity of the provision of Rule 12(1) of the Implementing Regulations.

For specific analyses of the above concluding comments, see the text of this Office Action.

7. In view of the above concluding comments, the examiner holds that:

- ☐ The applicant should amend the application document in accordance with the requirements raised in the text of this Office Action. The amended document(s) should be submitted in duplicate and should conform to the provisions of Article 33 of the Patent Law and Rule 51 of the Implementing Regulations of the Chinese Patent Law.
- ☒ The applicant should expound in his Observations the reasons why the captioned patent application is patentable and amend the places not conforming to regulations as pointed out in the text of the Office Action, otherwise it would be impossible for the patent right to be granted.
- ☐ The captioned patent application contains no substantive content for which the patent right may be granted, thus if the applicant has not advanced his reasons or has not done so adequately, the application will be rejected.

8. The applicant should pay attention to the following matters:

- (1) In accordance with the provision of Article 37 of the Patent Law, the applicant should submit his/its Observations within **four** months from the date of receipt of this Office Action; if, without any justified reason, the time limit for making response is not met, the application will be deemed to have been withdrawn.
- (2) The amendments made by the applicant to his application should conform to the provision of Article 33 of the Patent Law, the amended text should be in duplicate and the format should conform to the relevant provisions of the Guidelines for Examination.
- (3) The applicant's Observations or amended text should be mailed or presented to the Receiving Section of the Chinese Patent Office. Document not mailed or presented to the Acceptance Section have no legal force.
- (4) Without making an appointment, the applicant and/or agent may not come to the Chinese Patent Office to hold an interview with the examiner.

9. This Office Action consists of the text portion totalling 3 page(s) and of the following annex(es):

- ☒ 3 duplicate copies of the reference document(s) cited totalling 24 page(s).

Your Ref: **FPC081-002**

Our Ref: **CPME0441201**

### **Text of the First Office Action**

Application number: 2004100350976

The present application relates to a hydraulic valve device and method for assembling the same. Upon examination, the Examiner's comments are hereby made as follows:

1. Claim 1 of the present application claims a hydraulic valve device. Reference document 1 (US5138837A) has disclosed a load independent valve control for a hydraulic system and, in particular, the following technical features (see line 57, column 2 to line 31, column 5 of the description and Fig.1). Namely, said hydraulic system comprises a main valve block 1, a control valve 19, a pressure oil supply line 41 connected to a pump, and a tank line connected to an oil tank; an end cover 20 attached to a side face of said main valve block; said main valve block further comprising an option valve (the valve 19 on the leftmost of Fig.1) disposed adjacent said end cover adapted to control the operation of an option actuator; a pressure oil supply passage (a branch line connecting the pressure oil supply line 41 and the option valve 2) which connects said option valve and said pressure oil supply line with each other; a return passage which connects said option valve 2 and said tank line with each other; actuator passages 9a and 9b to which said option actuator is connected; a pressure oil branch passage branching from said pressure oil supply passage 41 and provided at a front end of said pressure oil branch passage with a pressure oil branch port which is closed with said end cover 20 (not shown in the figure, see lines 45-46, column 4 of the description); and a return branch passage branching from the tank line and provided at a front end of said return branch passage with a return branch port which is closed with said end cover 20 (it can be obviously seen from the figure that the tank line is closed by the end cover 20 at one end). Thus, it can be seen that reference document 1 has already disclosed most of the technical

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features of claim 1.

Claim 1 is different from reference document 1 in that the main valve block comprises a check valve and an actuator branch passage branching from said actuator passage and closed with said end cover. The technical problem claim 1 is actually intended to solve with respect to reference document 1 is to prevent reverse flowing of pressure oil from the pressure oil supply passage to the pressure oil supply line and to conveniently control and select the operation of actuator using actuator branch port.

However, reference document 2 (US6430922B2) has disclosed a hydraulic system for a construction machine and, in particular, the following technical features (see line 8, column 3 to line 43, column 4 of the description and Fig.1). Namely, the main valve block in the hydraulic system comprises check valves 14 and 15, and a actuator branch passage branching from each actuator passage and provided at a front end of said actuator branch passage with an actuator branch port which is closed with an end cover (it can be obviously seen from the figure that the branch port of each actuator is closed by an end cover). Thus, it can be seen that the aforesaid distinctive technical features have already been disclosed in reference document 2. Besides, the function these known technical features perform is the same as the technical problem to be actually solved in claim 1, namely preventing reverse flowing of pressure oil from the pressure oil supply passage to the pressure oil supply line using the check valves and conveniently controlling and selecting the operation of actuator using actuator branch port. Therefore, those skilled in the art can obtain inspiration from reference document 2 to apply the aforesaid distinctive technical features to the hydraulic system of reference document 1 so as to obtain the technical solution claimed in claim 1. That is to say, the combination of reference document 1 and reference document 2 is obvious. Besides, this combination fails to produce any unexpected technical effect. Therefore, the technical solution claimed in said claim does not have any prominent substantive features, nor represents a notable progress and is non-inventive under Article 22.3 of the Patent Law.

2. The additional technical features in the characterising portions of dependent claim 2, namely "said pump comprises a first pump and a second pump, and said main valve block comprises a first main valve block which uses said first pump as a pressure oil

source and a second main valve block which uses said second pump as a pressure oil source”, have already been correspondingly disclosed in reference document 2 (see line 8, column 3 to line 43, column 4 of the description and Fig.1). Besides, the additional technical features perform the same function in said reference document as in this invention. Therefore, when the referred claim is non-inventive, said dependent claim is non-inventive under Article 22.3 of the Patent Law, either.

3. The additional technical features in the characterising portions of dependent claim 3, namely “said first main valve block and said second main valve block are coupled together in a state in which respective rear sides of the main valve blocks are in contact with each other, said end cover is attached to a side face of each of said first and second main valve blocks, said option valve disposed adjacent said end cover, said pressure oil supply passage, said return passage, said actuator passage, said check valve, said pressure oil branch passage, said return branch passages, and said actuator branch passage are provided within one of said main valve blocks, and a confluence passage for joining pressure oil within both said main valve blocks is disposed through both said main valve blocks, said confluence passage being closed with said end cover”, have already been correspondingly disclosed in reference document 2 (see line 8, column 3 to line 43, column 4 of the description and Fig.1). Besides, the additional technical features perform the same function in said reference document as in this invention. Therefore, when the referred claim is non-inventive, said dependent claim is non-inventive under Article 22.3 of the Patent Law, either.

4. Claim 15 claims a method for assembling a hydraulic valve device. Reference document 3 (EP1253327A) has disclosed a method for assembling a hydraulic valve, comprising the following steps (see line 54, column 1 to line 31, column 6 of the description and Figs.1 and 2): installing option valves 13 and 14 into a side face of a main valve block 17 to which side face an end block 16 is attached, with control valves 11 and 12, a pressure oil supply line 21 connected to a pump and a tank line 23 being incorporated in said main valve block 17; and attaching a predetermined connection end block 16 to said main valve block 17 in accordance with a function of said option valve

out of plural types of connection blocks hydraulically connected to said option valve and incorporating circuit elements therein. Thus, it can be seen that said reference document has already disclosed all the technical features of said claim. Besides, the technical solution disclosed in said reference document and that claimed in said claim are of the same technical field and capable of producing the same technical effect. Therefore, said claim is non-novel under Article 22.2 of the Patent Law.

For the above reasons, the present application based on the current text cannot be granted the patent right yet. The applicant should, within the time limit for response prescribed herein, sufficiently state the reasons that the present application has patentability, and make amendment to the application documents according to the comments made herein to rectify the existing defects. The amendments to the application documents shall comply with the provisions of Article 33 of the Patent Law and may not go beyond the scope of the disclosure contained in the initial description and claims. The amendment documents to be submitted by the applicant shall include: 1) a copy of the parts of the original to which amendment is related and on which pertinent addition, deletion or substitution shall be indicated with red pen or ball-pen; and 2) reprinted replacement sheets in duplicate for substituting the corresponding part of the original. The applicant should ensure that the aforesaid two parts are consistent with one another in content.



# 中华人民共和国国家知识产权局

邮政编码: 100032 北京市西城区金融街 27 号投资广场 B 座 19 层 中国专利代理(香港)有限公司 原绍辉	发文日期
申请号: 2004100350976	
申请人: 神钢建设机械株式会社	
发明创造名称: 液压阀装置及其组装方法	



## 第一次审查意见通知书

0441201

1. ☒ 应申请人提出的实审请求, 根据专利法第 35 条第 1 款的规定, 国家知识产权局对上述发明专利申请进行实质审查。

☐ 根据专利法第 35 条第 2 款的规定, 国家知识产权局决定自行对上述发明专利申请进行审查。

2. ☒ 申请人要求以其在:

JP 专利局的申请日 2003 年 04 月 23 日为优先权日,  
专利局的申请日 年 月 日为优先权日,  
专利局的申请日 年 月 日为优先权日,  
专利局的申请日 年 月 日为优先权日,  
专利局的申请日 年 月 日为优先权日。

25 JUN 2006

☒ 申请人已经提交了经原申请国受理机关证明的第一次提出的在先申请文件的副本。

☐ 申请人尚未提交经原申请国受理机关证明的第一次提出的在先申请文件的副本, 根据专利法第 30 条的规定视为未提出优先权要求。

3. ☐ 经审查, 申请人于:

年 月 日提交的 不符合实施细则第 51 条的规定;  
年 月 日提交的 不符合专利法第 33 条的规定;  
年 月 日提交的

京办完成

4. 审查针对的申请文件:

☒ 原始申请文件。 ☐ 审查是针对下述申请文件的

申请日提交的原始申请文件的权利要求第	项、说明书第	页、附图第	页;
年 月 日提交的权利要求第	项、说明书第	页、附图第	页;
年 月 日提交的权利要求第	项、说明书第	页、附图第	页;
年 月 日提交的权利要求第	项、说明书第	页、附图第	页;
年 月 日提交的说明书摘要,	年 月	日提交的摘要附图。	

5. ☐ 本通知书是在未进行检索的情况下作出的。

☒ 本通知书是在进行了检索的情况下作出的。

☒ 本通知书引用下述对比文献(其编号在今后的审查过程中继续沿用):

编号	文件号或名称	公开日期(或抵触申请的申请日)
1	US5136837 A	1992 年 8 月 18 日
2	US6430922 B2	2002 年 8 月 13 日
3	EP1253327 A1	2002 年 10 月 30 日

6. 审查的结论性意见:

☐ 关于说明书:

21301  
2002.8



回函请寄: 100088 北京市海淀区蓟门桥西土城路 8 号 国家知识产权局专利局受理处收  
(注: 凡寄给审查员个人的信函不具有法律效力)





申请号 2004100350976

- ☐ 申请的内容属于专利法第 5 条规定的不授予专利权的范围。
- ☐ 说明书不符合专利法第 26 条第 3 款的规定。
- ☐ 说明书不符合专利法第 33 条的规定。
- ☐ 说明书的撰写不符合实施细则第 18 条的规定。

☒ 关于权利要求书:

- ☒ 权利要求 15 不具备专利法第 22 条第 2 款规定的新颖性。
- ☒ 权利要求 1-3 不具备专利法第 22 条第 3 款规定的创造性。
- ☐ 权利要求 不具备专利法第 22 条第 4 款规定的实用性。
- ☐ 权利要求 属于专利法第 25 条规定的不授予专利权的范围。
- ☐ 权利要求 不符合专利法第 26 条第 4 款的规定。
- ☐ 权利要求 不符合专利法第 31 条第 1 款的规定。
- ☐ 权利要求 不符合专利法第 33 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 2 条第 1 款关于发明的定义。
- ☐ 权利要求 不符合专利法实施细则第 13 条第 1 款的规定。
- ☐ 权利要求 不符合专利法实施细则第 20 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 21 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 22 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 23 条的规定。

上述结论性意见的具体分析见本通知书的正文部分。

7. 基于上述结论性意见, 审查员认为:

- ☐ 申请人应按照通知书正文部分提出的要求, 对申请文件进行修改。
- ☒ 申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由, 并对通知书正文部分中指出的不符合规定之处进行修改, 否则将不能授予专利权。
- ☐ 专利申请中没有可以被授予专利权的实质性内容, 如果申请人没有陈述理由或者陈述理由不充分, 其申请将被驳回。

8. 申请人应注意下述事项:

- (1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的肆个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。
- (2) 申请人对其申请的修改应符合专利法第 33 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。
- (3) 申请人的意见陈述书和/或修改文本应邮寄或递交国家知识产权局专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。
- (4) 未经预约, 申请人和/或代理人不得前来国家知识产权局专利局与审查员举行会晤。

9. 本通知书正文部分共有 3 页, 并附有下列附件:

- ☒ 引用的对比文件的复印件共 3 份 24 页。 ☐



审查员: 刘景逸 (2280)

2006 年 1 月 8 日

审查部门 机械发明审查部

21301  
2002.8



回函请寄: 100088 北京市海淀区蓟门桥西土城路 8 号 国家知识产权局专利局受理处收  
(注: 凡寄给审查员个人的信函不具有法律效力)

## 第一次审查意见通知书正文

申请号：2004100350976

该申请请求保护一种液压阀装置及其组装方法，经审查，现提出如下审查意见：

1. 该申请的权利要求1请求保护一种液压阀装置，对比文件1（US5138837A）公开了一种独立负载控制阀液压系统，并具体公开了（参见其说明书第2栏第57行～第5栏第31行，图1）该液压系统包括主阀组1，控制阀19，连接到泵上的压力油供应管线41以及连接到油箱上的油箱管线；连接到主阀组侧面上的端盖20；主阀组还包括有设置在阀盖附近的适用于控制选择致动器操作的选择阀（图1中最左端的阀19）；压力油供应通道（连接压力油供应管线41和选择阀2的支路）将选择阀和压力油线路相互连接；将选择阀2与油箱管线连接在一起的返回通道；选择致动器所连接的致动器通道9a，9b；压力油分支通道从压力油供应通道41中分出并且在压力油分支通道前端设置一个利用端盖20封闭的分支端口（图中未示出，见说明书第四栏45，46行）；返回分支通道从油箱管线中分出并且返回分支通道的前端设置有利用端盖20封闭的返回分支端口（从图中可以明显的看出油箱管线的一端被端盖20封闭）。由此可见，对比文件1已经公开了权利要求1的大部分技术特征。

权利要求1和对比文件1相比，其区别技术特征是主阀组中包括有止回阀和从致动器通道中分出并利用端盖封闭的致动器分支通道。权利要求1相对于对比文件1实际要解决的问题是防止压力油从压力油供应通道中逆流到压力油供应管线和利用致动器分支端口方便地控制和选择致动器操作。

但是对比文件2（US6430922B2）公开了一种建筑机械液压系统，并具体公开了（参见其说明书第3栏第8行～第4栏第43行，图1）液压系统的主阀组中包括有止回阀14、15；致动器分支通道从各个致动器通道中分出，并且在致动器分支通道的前端设置有利用端盖封闭的致动器分支端口（图中可以明显看出各个致动器分支端口被端盖所封闭）。由此可见，上述区别技术特征已经被对比文件2所公开，并且这些已知技术特征所起的作用与权利要求1实际所要解决的问题相同，都是利用止回阀防止压力油从压力油供应通道中逆流到压力油供应管线和利用致动器分支端口方便地控制和选择致动器操作。因此该领域的技术人员可以从对比文件2中得到启示，将上述区别技术特征应用于对比文件1的液压系统中，从而得到权利要求1要求保护的技术方案，也就是说对比文件1与对比文件2的这种结合对于所属技术领域的技术人员来说是显而易见的，并且这种结合没有产生预料不到的技术效果，因此该权利要求所请求保护的方案不具备突出的实质性特点和显著的进步，因而不具备创造性。不符合专利法第22条第3款的规定。

2. 从属权利要求2限定部分的附加技术特征"所述泵包括第一泵和第二泵, 并且所述主阀组包括使用所述第一泵作为压力油源的第一主阀组和使用所述第二泵作为压力油源的第二主阀组。"已经被对比文件2相应地公开(参见其说明书第3栏第8行~第4栏第43行, 图1), 而且所附加的技术特征在该对比文件中所起的作用与其在本发明中所起的作用相同, 在其引用的权利要求1不具备创造性的情况下, 该从属权利要求也不具备专利法第22条第3款规定的创造性。

3. 从属权利要求3限定部分的附加技术特征"所述第一主阀组和所述第二主阀组在主阀组的相应后侧相互接触的状态下连接在一起, 所述端盖连接到所述第一和第二主阀组的每一个的侧面上, 设置在所述端盖附近的所述选择阀、所述压力油供应通道、所述返回通道、所述致动器通道、所述止回阀、所述压力油分支通道、所述返回分支通道以及所述致动器分支通道设置在所述主阀组其中之一内, 并且用于汇合两个所述主阀组中的压力油的合流通道通过两个所述主阀组设置, 所述合流通道利用所述端盖封闭。"已经被对比文件2所公开(参见其说明书第3栏第8行~第4栏第43行, 图1), 且其在该对比文件中所起的作用与其在本发明中所起的作用相同, 在其引用的权利要求1不具备创造性的情况下, 该从属权利要求也不具备专利法第22条第3款规定的创造性。

4. 权利要求15请求保护一种用于组装液压阀装置的方法。对比文件3

(EP1253327A)公开了一种组装液压阀的方法, 包括(参见其说明书第1栏第54行~第6栏第31行, 图1~2)以下步骤: 把选择阀13、14安装在主阀组17的侧面, 端块16连接在该侧面上, 控制阀11、12, 连接在泵上的压力油供应管线21以及油箱管线23结合在主阀组17中; 根据与所述选择阀液压连接并且其中结合有回路元件的多种连接组外的所述选择阀的功能, 将预先确定好的连接端块16连接在主阀组17上。由此可见, 该对比文件已经公开了该权利要求的全部技术特征, 且该对比文件所公开的技术方案与该权利要求所要求保护的技术方案属于同一技术领域, 并能产生相同的技术效果, 因此该权利要求不具备新颖性。不符合专利法第22条第2款的规定。

基于上述理由, 本申请按照目前的文本还不能被授予专利权。申请人应当在答复期限内充分论述本申请具备专利性的理由, 并按照本通知书提出的审查意见对申请文件进行修改, 克服所存在的缺陷。对申请文件的修改应当符合专利法第33条的规定,

不得超出原说明书和权利要求书记载的范围。申请人提交的修改文件应当包括：第一，修改涉及部分的原文复印件，采用红色钢笔或红色圆珠笔在该复印件上标注出所作的增加、删除或替换；第二，重新打印的替换页（一式两份），用于替换相应的原文。申请人应当确保上述两部分在内容上的一致。

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